

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 35. (canceled)

36. (Currently Amended) A method for preventing contamination of a field emission display device, said method comprising:

a) providing a cathode structure of a field emission display device, said cathode structure comprising an electron emitting structure disposed above one side thereof; and

b) disposing a substantially continuous and substantially non-porous barrier layer of substantially uniform thickness over said one side of said cathode structure, wherein said barrier layer is configured to prevent substantial penetration of electrons through said barrier layer.

37. (previously presented) The method as recited in Claim 36 wherein said cathode structure comprises a cathode substrate of said field emission display device.

38. (canceled)

39. (previously presented) The method as recited in Claim 36 wherein said b) comprises disposing said barrier layer over said cathode structure such that said barrier layer has a thickness sufficient to prevent substantial penetration of said electrons therethrough.

40. (previously presented) The method as recited in Claim 36 wherein said b) comprises disposing a barrier layer over said cathode structure wherein said barrier layer is selected from the group consisting of silicon dioxide, Al_2O_3 , CrO_x , ZnO , Si_3N_4 , SiO_2 , TaO_5 , Tin Oxide, ITO, ZrO_2 , Y_2O_3 , TiO_2 and MgO and combinations thereof.

41. (previously presented) The method as recited in Claim 36 wherein said b) comprises disposing a barrier layer of silicon dioxide to a thickness of approximately 100 nanometers over said substrate structure.

42. (previously presented) The method as recited in Claim 36 wherein said b) comprises disposing said barrier layer over said cathode structure wherein said barrier layer prevents migration of contaminants from said cathode structure into said field emission display device, said contaminants due to electron bombardment of said cathode structure.

43. (previously presented) The method as recited in Claim 36

wherein said b) comprises disposing said barrier layer over said cathode structure such that said barrier layer prevents migration of sodium from said substrate structure into said field emission display device.

44. (previously presented) The method as recited in Claim 36 wherein said b) comprises disposing an electrically conductive barrier layer over said cathode structure.

45. - 51. (canceled)

52. (previously presented) The method of Claim 36 wherein said cathode structure comprises high sodium glass.

53. (currently amended) A field emission display device comprising means for preventing migration of contaminants from a cathode structure into an active region of said field emission display device, said contaminants due to electron bombardment of said cathode structure, said preventing means comprising a substantially continuous and substantially non-porous barrier layer of substantially uniform thickness between said cathode structure and plurality of cathode emitters.

54. (previously presented) The field emission display device of Claim 53 wherein said cathode structure comprises high sodium

glass.

55. (canceled)

56. (currently amended) The field emission display device of Claim ~~55~~ 53 wherein said barrier layer is configured to prevent substantial penetration of electrons from said cathode emitters into said cathode structure.

57. (currently amended) The field emission display device of Claim ~~55~~ 53 wherein said barrier layer comprises a material thickness and wherein said barrier layer of said material thickness is sufficient to prevent substantial penetration of electrons from said cathode emitters into said cathode structure.

58. (previously presented) The field emission display device of Claim 54 wherein said barrier layer comprises silicon dioxide about 100 nanometers thick.

59. (New) The method of claim 36, wherein said barrier layer comprises multiple layers.

60. (New) The method of claim 36, further comprising:

c) disposing a substantially conductive coating layer over said barrier layer.

61. (New) The device of claim 53, wherein said barrier layer comprises multiple layers.

62. (New) The device of claim 53, further comprising:

a substantially conductive coating layer disposed over said barrier layer.